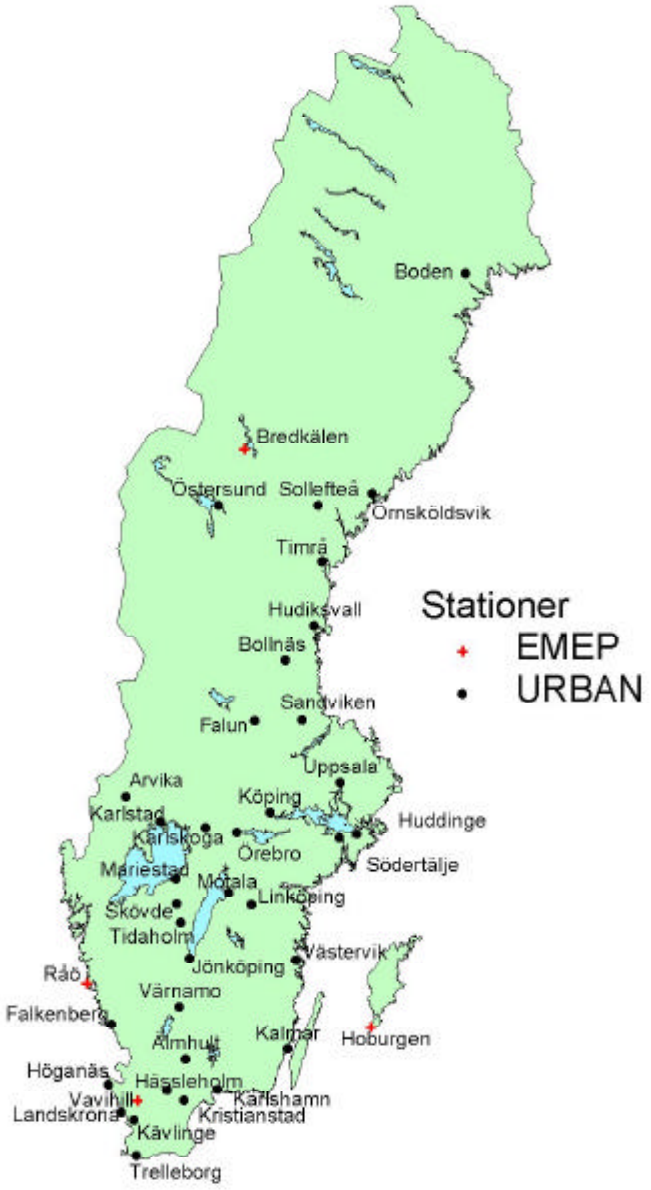
Swedish Environmental Research Institute

Karin Persson

The Swedish URBAN Air Quality Network

- introduction
- results
- trends



The Swedish URBAN Air Quality Network

* Co-operation between IVL and Swedish cities
* Established in 1986
* 30 - 60 participating cities each year
*one third of the Swedish local municipalities has been participating at least one winter season

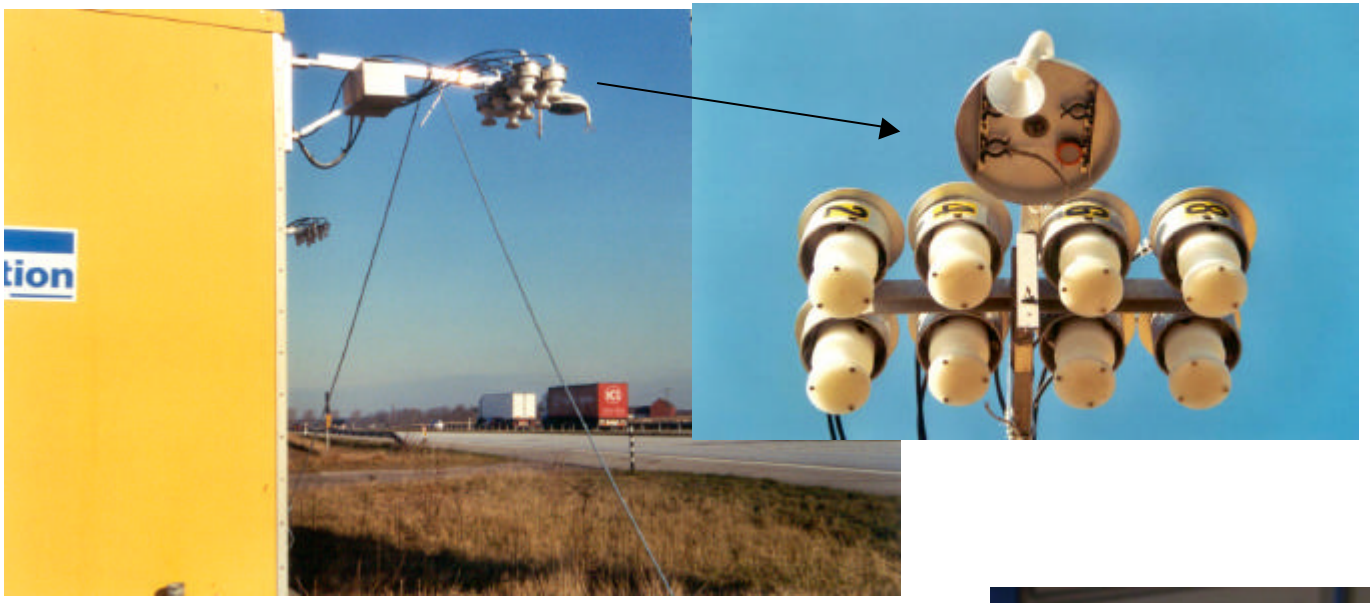
Measurements

* Daily sampling of NO_2, SO_2, soot, PM_{10} ($PM_{2.5,}$ PM_1)
* Weekly sampling of VOC
* Monthly sampling of NO_2, SO_2 and O_3 in regional background

IVL

Measurement methods

Daily measurements



Weekly and monthly measurements
diffusive sampler

IVL

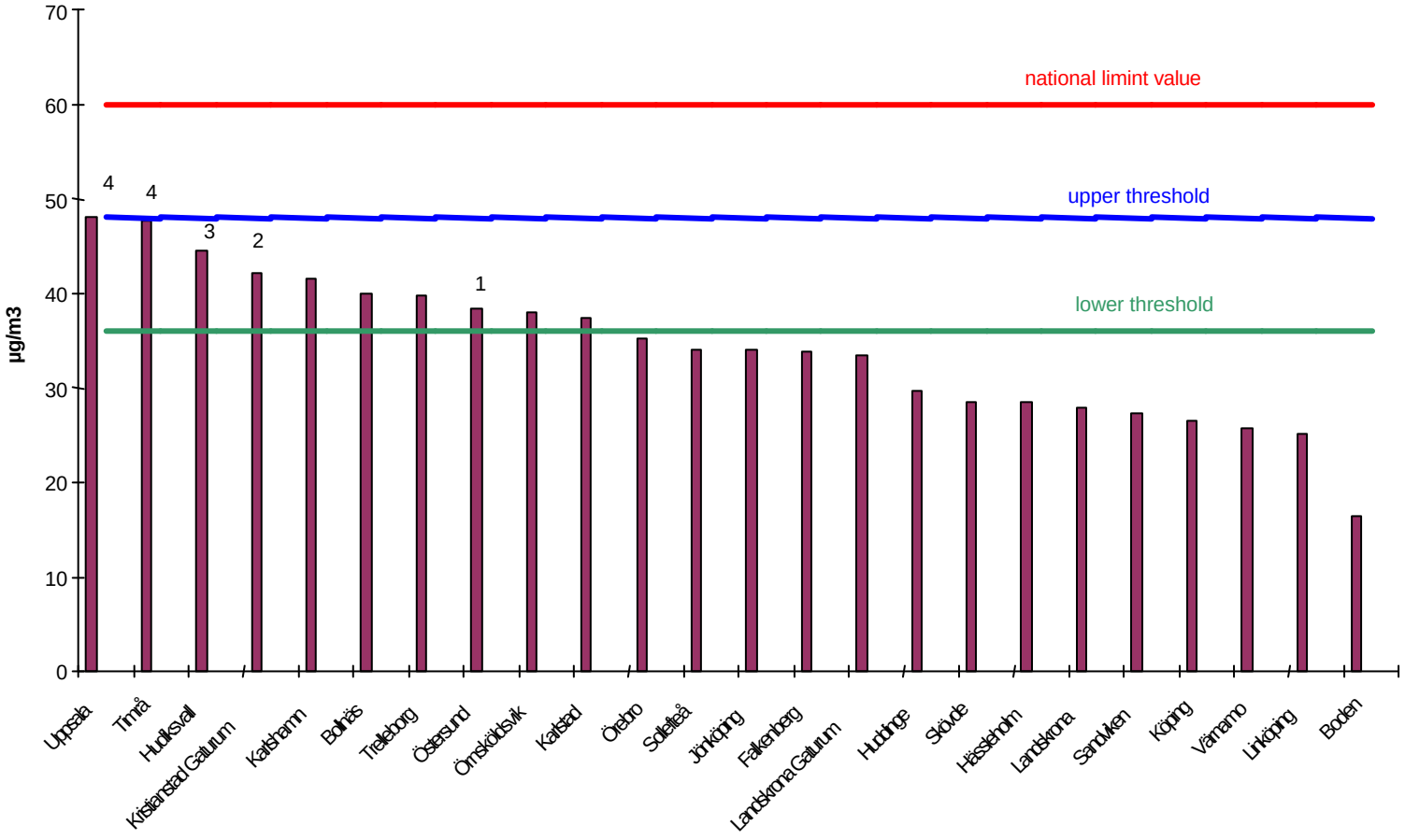
Purpose:

- to enable municipal authorities to evaluate and describe the air quality situation in cities with respect to guidelines etc
- contribute to develop cost-efficient methods for measurements and strategies

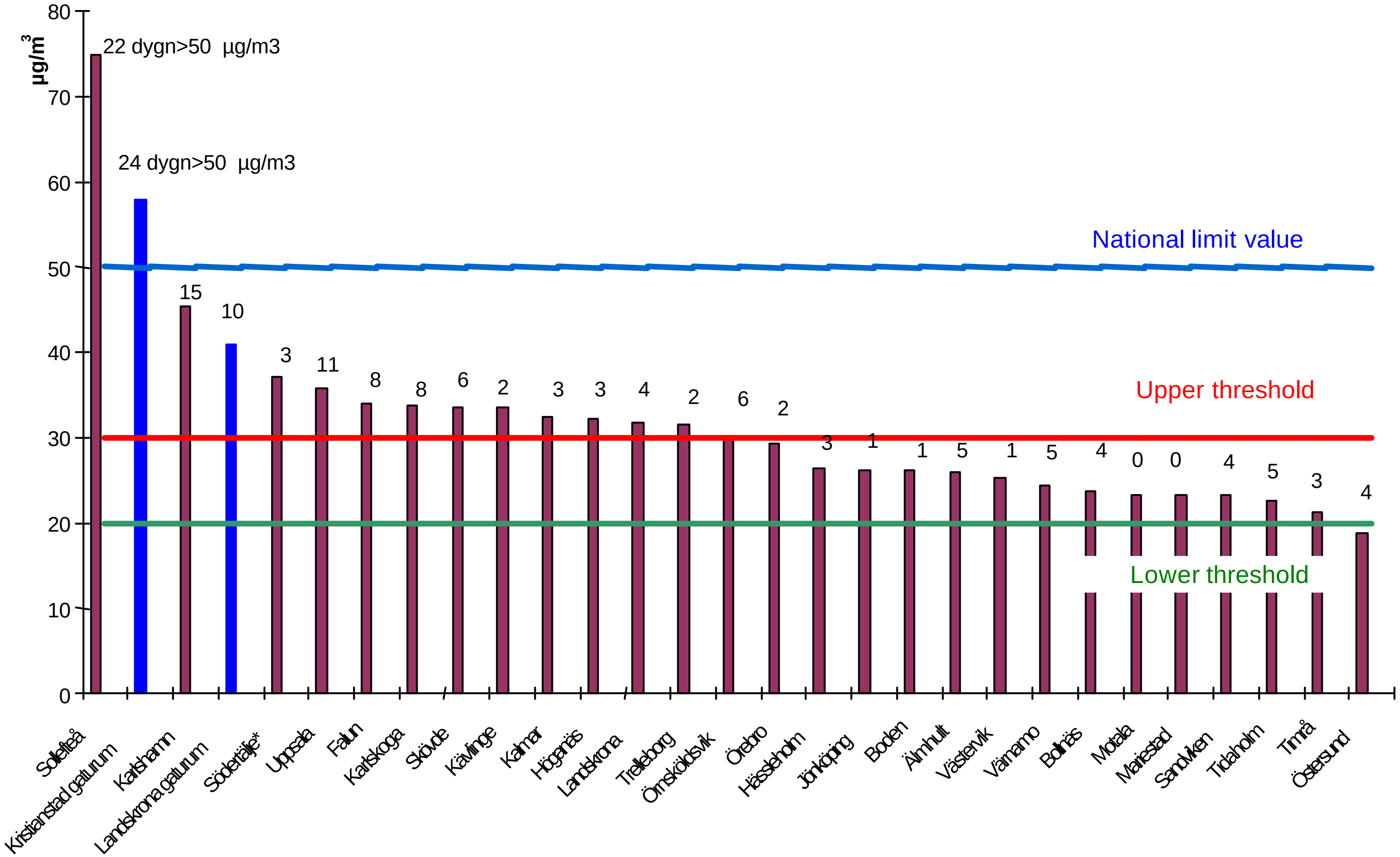
- to compare measurements between cities.
- Study long-term changes in air-quality

- determine contributions from local, regional and foreign sources
- Input to planning and follow-up actions
- Assessment of health effects for the city population

98-percentile of NO_2 in urban background, winter season 2004/05, compared to limit values

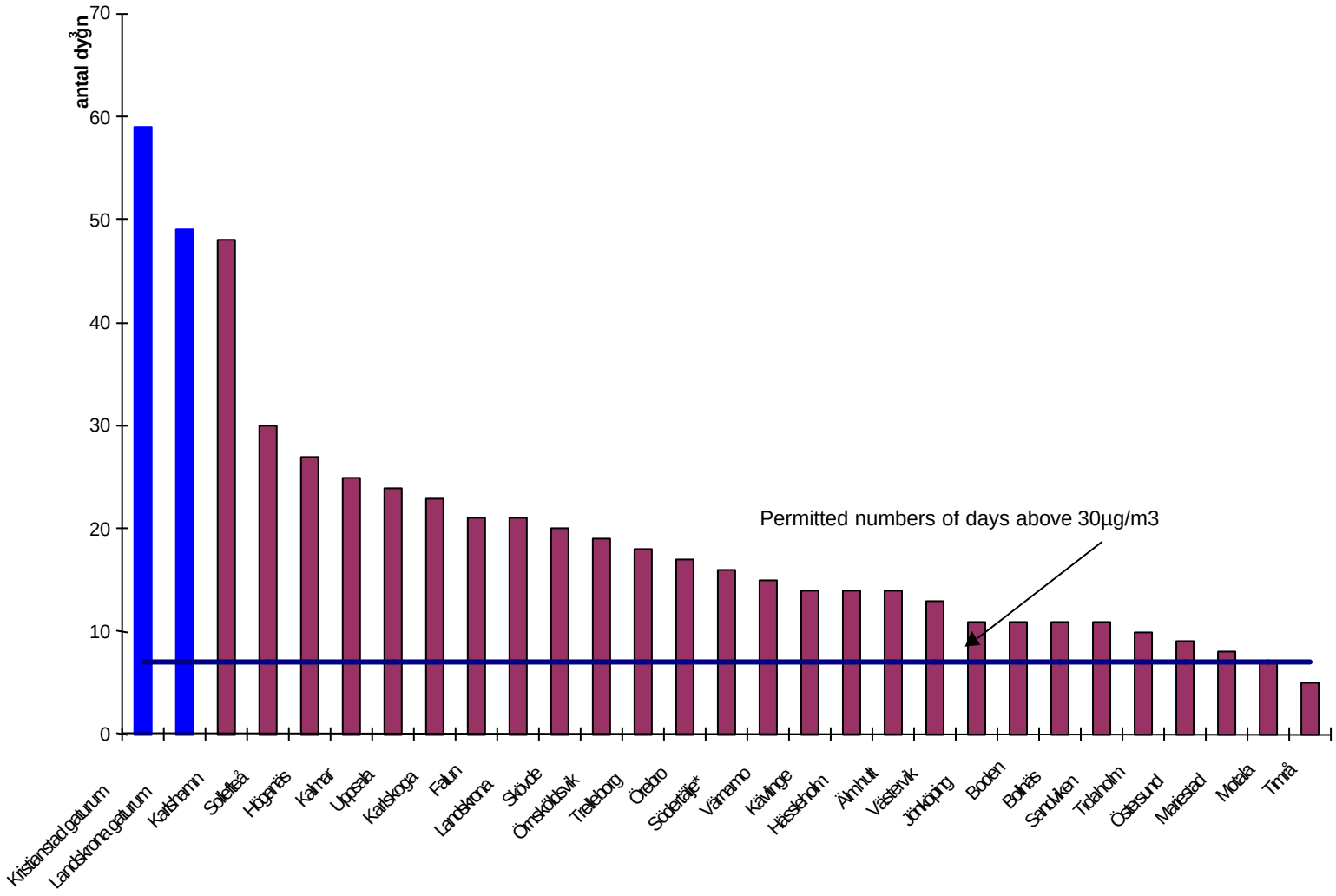


90-percentile of PM_{10} winter season 2004/05

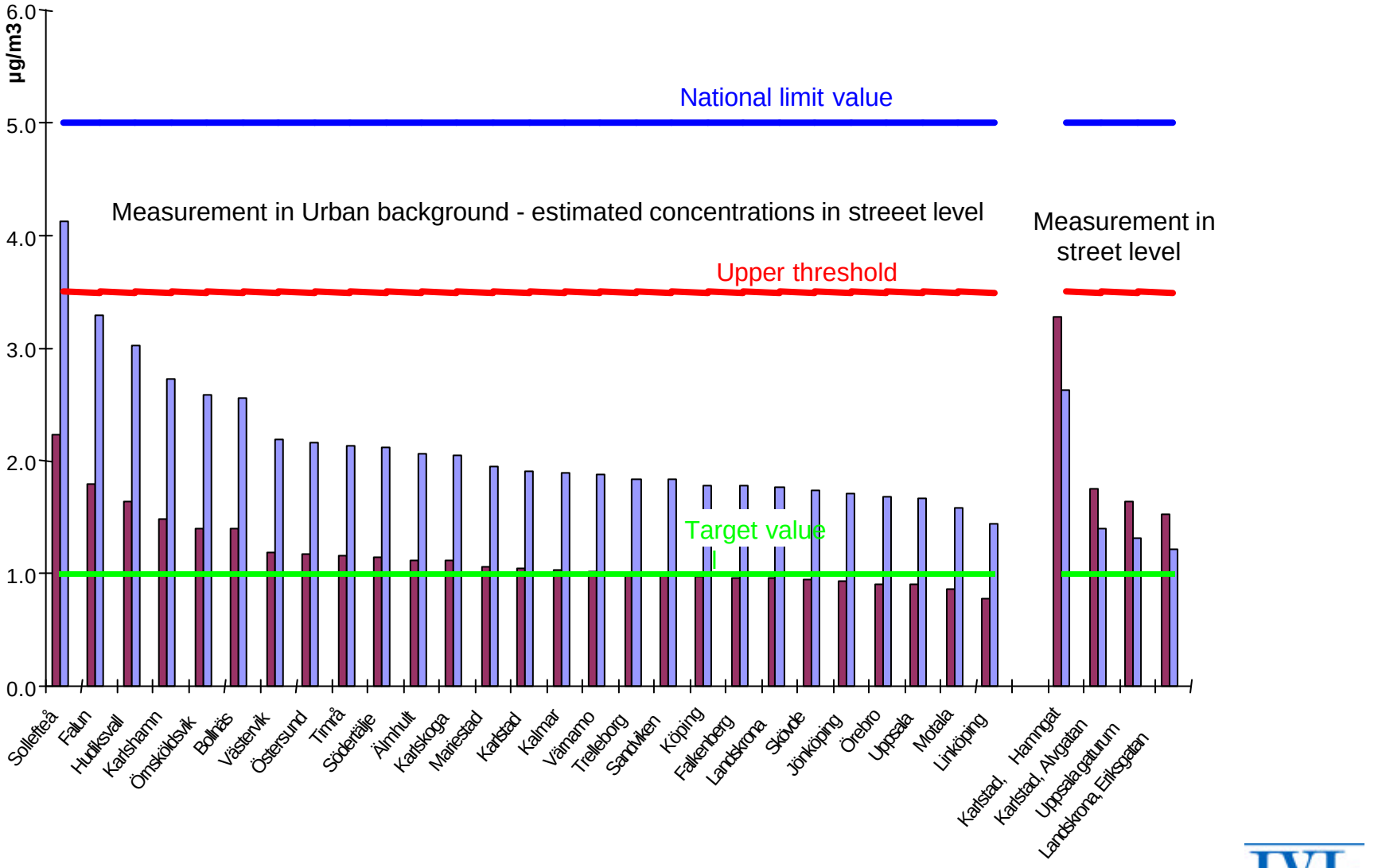


IVL

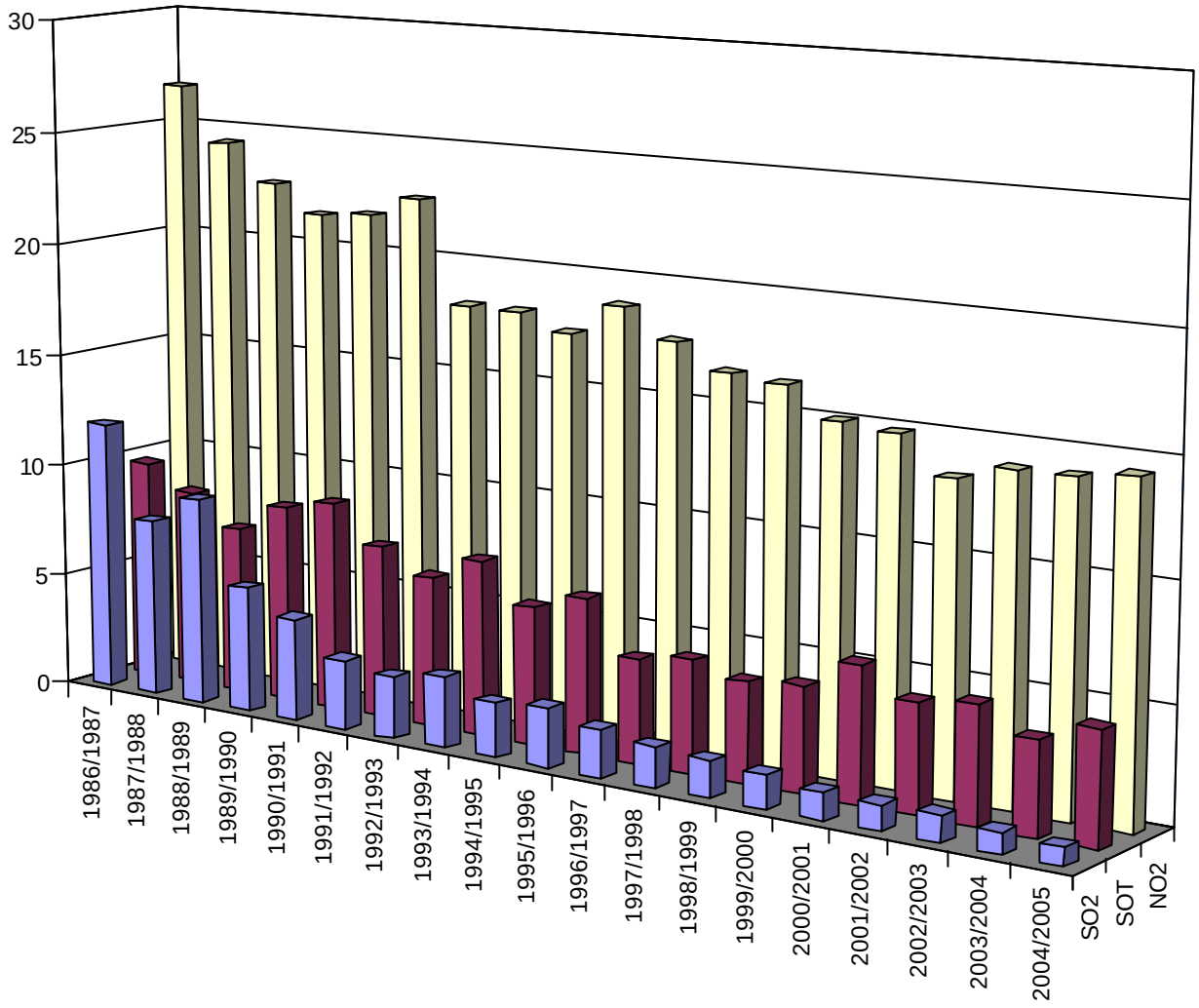
Days with concentrations of PM_{10} above 30 µg/m^3 (upper threshold) 2004/05



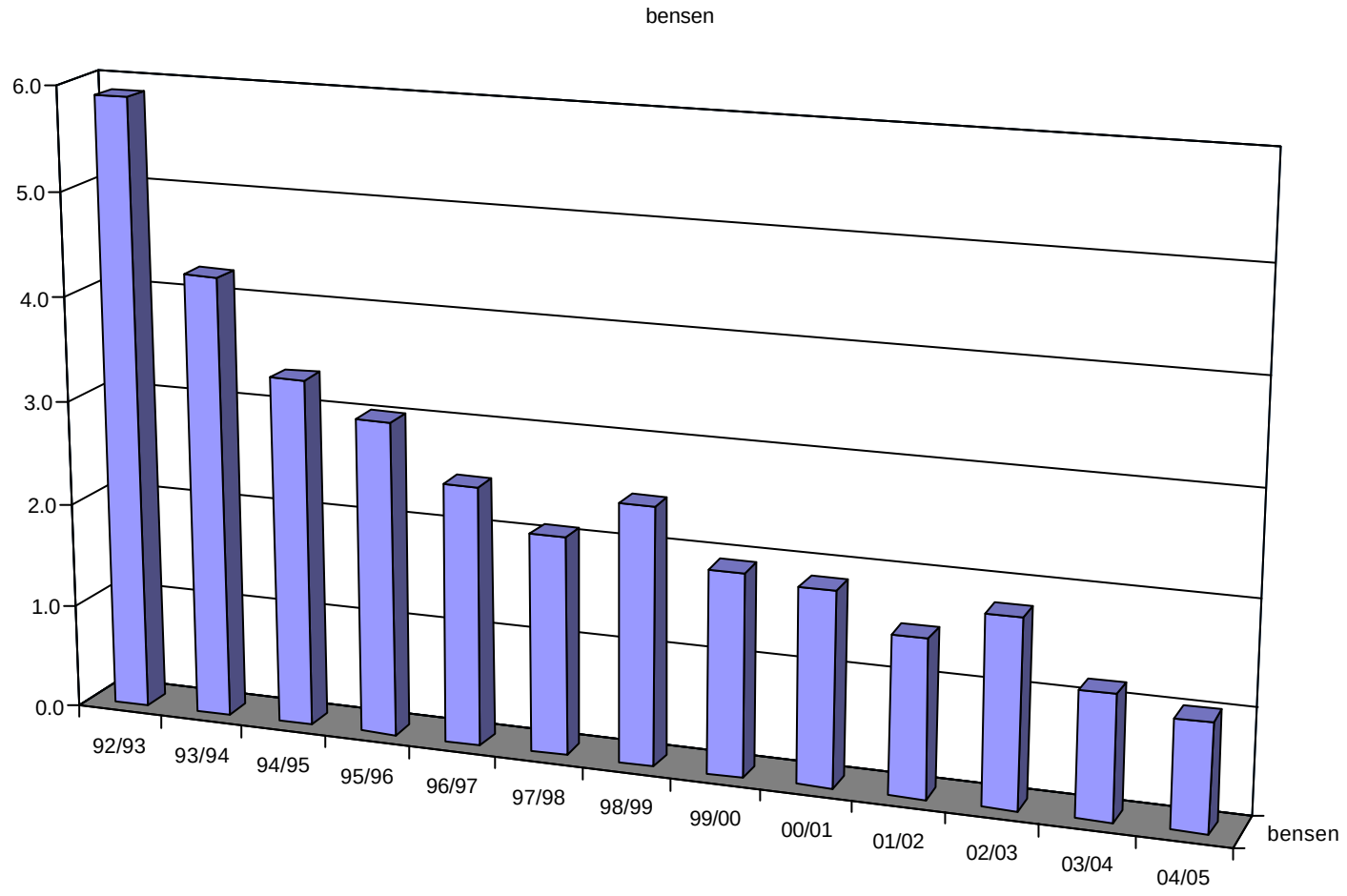
Concentrations of benzene winter season 2004/05



”National” winter season averages of SO_2, soot and NO_2 between 1986/87 and 2004/05



”National” winter season averages of benzene between 1986/87 and 2004/05



Time trend of NO_2 , benzene and percentage of cars with catalytic converters